Fleet Rule Implementation Charts For Use With The 2011 Carl Moyer Program Guidelines

This document is for informational purposes only.
ARB/Air districts will determine project eligibility.

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The information provided below is for informational purposes only. ARB and local air districts will make eligibility determinations. Eligibility determinations will be based on applicable statute, guidelines, and mobile source mail outs, which are available at http://www.arb.ca.gov/msprog/moyer/moyer.htm.

This document describes possible funding options for vehicles/equipment subject to the ARB in-use fleet rules. Eligibility is directly impacted by pollutant(s) to be claimed by the project and timing of the project.

For most potential projects, this document includes charts to help ARB and air districts ensure that the reductions are surplus as required by Guidelines. Instructions for reading those charts are below.

Implementation charts are developed specifically for each applicable source category. The format and content of implementation charts varies for each source category due to differences in regulatory requirements.

Instructions for Reading the Fleet Rule Carl Moyer Implementation Charts

The charts provided throughout this document are to be used as tools when determining eligibility for projects claiming surplus NOx, ROG and/or PM from vehicles/equipment subject to ARB fleet rules.

If there are enough years prior to the applicable compliance deadline to meet minimum project life requirements (left of the solid line in charts):

1. The vehicle/equipment is eligible for the incremental cost assuming it meets all other criteria as described in the Carl Moyer Program Guidelines and mobile source mail outs.
2. The project life is based on the number of years before the compliance deadline as well as the maximum project life allowed for the project category.
3. Projects are eligible for the incremental cost up to the cost-effective threshold.
4. Remaining vehicles/equipment within the compliance portion of the regulation are not eligible for funding.
5. Work can begin on Carl Moyer-funded projects once the contract has been fully executed.

Key:

	=Years With Potential Carl Moyer Funding for Specified Pollutant
	=Minimum Surplus
▬	=Compliance Deadline
Number in Cell	=Years of surplus

Example 1: PERCENT PHASE-IN FUNDING OPTION

If an applicant is subject to the chart below and is applying for funding, eligibility would be determined as follows:

PM Eligibility					
Vehicles Eligible for Funding	2011	2012	2013	2014	2015
100% of Group					
80% of Group					
40% of Group	**4**	**3**			

A) Projects installed and in operation by 12/31/11:
1. Districts can fund the PM portion of up to 40% of the vehicle group (green cells).
2. The vehicles will have a 4 year project life.
3. The applicant must agree by contract that the fleet is in compliance with all rules and regulations and will remain in compliance.

B) Projects installed and in operation by 12/31/12:
1. Districts can fund the PM portion of up to 40% of the vehicle group (green cells).
2. The vehicles will have a 3 year project life.
3. The applicant must agree by contract that the fleet is in compliance with all rules and regulations and will remain in compliance.

If the projects are completed and in operation any time after 1/1/13 then it is not eligible for PM funding.

Example 2: FLEET AVERAGE FUNDING OPTION

If an applicant is subject to the chart below and is applying for funding, eligibility would be determined as follows:

Fleetwide PM levels	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
>0.18 - ≤ 0.3	5	4	3							

The existing engine would be eligible for Moyer funds for a repower project with a new diesel engine through 2013 if the applicant's fleet has met the weighted PM emission fleet average of 0.3 g/bhp-hr PM. The project may use a

A) Five year project life through 2011
B) Four year project life through 2012
C) Three year project life through 2013

Example 3: MODEL YEAR FUNDING OPTION

The chart below is an extract of the complete chart for: Ferries, Excursion Vessels, Tugboats, Towboats, and Push Boats with Homeports Outside SCAQMD

Engine Model Year	Total Annual Hours of Operation	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
2005	≥ 300	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**				

For an excursion vessel with a 2005 model year engine, the chart extract above indicates the following:

- This engine is eligible for Moyer program funding, provided the replacement is installed and in operation prior to 12/31/2017.
- The green cells each contain a number representing the maximum allowable project life, assuming the project is funded by 12/31 in the calendar year above the cell. In other words, a 2005 baseline engine project funded 12/31/2013 may have a maximum 7 year life, but if it were funded on 1/1/2013, the project life may be up to eight years.

Projects Subject to the Statewide Truck & Bus Regulation

- *Regulation affects diesel vehicles over 14,000 Gross Vehicle Weight Rating (GVWR).*
- *Most vehicles have oxides of nitrogen (NOx) and particulate matter (PM) requirements; there are no reactive organic gas (ROG) requirements.*
- *ROG reductions are surplus.*
- *School buses have separate PM-only requirements.*
- *Log trucks, agricultural vehicles, and vehicles in NOx-exempt areas have separate requirements.*
- *Two year minimum project life for fleets of 1-3 vehicles; all other fleets have a three year minimum project life.*
- *Funded projects may not be used for compliance extensions, delays or regulatory credits.*
- *The applicant must submit a signed Declaration of Compliance form at the time of application.*
- *The applicant must provide to the air district a statement of compliance with the Truck & Bus Regulation no later than the time of pre-inspection.*
    - *Prior to January 31, 2012, districts may accept an applicant's written declaration of fleet size and compliance status in any format acceptable to the air district. Additional documentation of fleet size may be required at the district's discretion, including DMV registration reports and insurance statements.*
    - *After January 31, 2012, districts must contact ARB to verify fleet size and compliance status. Call the Diesel Hotline: (866) 6-DIESEL (866-634-3735) and you will be directed to the correct staff, or email 8666DIESEL@arb.ca.gov. Written verification must be kept in the project file.*
- *Districts will not be held liable if applicants falsify compliance information.*
- *Districts must conduct a compliance check to determine if the applicant has any outstanding violations.*
- *Regulatory information can be found at: http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm*

FLEETS OF 1-3 VEHICLES

Section 1: GVWR over 26,000 pounds

PM Regulatory Requirements

GVWR	Vehicles in Compliance with PM BACT	Compliance Date
Over 26,000 pounds	1 2 3	January 1, 2014 January 1, 2015 January 1, 2016

NOx Regulatory Requirements

- By January 1, 2020 must meet the requirements of California Code of Regulations, title 13, section 2025(g).

Potential Funding

PM Eligibility												
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Vehicles in compliance →	0	0	0	1	2	3	3	3	3	3	3	3
Vehicles eligible for funding ↓												
3	**2**											
2	**3**	**2**										
1	**4**	**3**	**2**									

NOx Eligibility												
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Engine model years in compliance →	none	none	none	none	none	none	none	none	none	1999 & older	2004 & older	2006 & older
Engine model year for funding ↓												
1999 & older	**8**	**7**	**6**	**5**	**4**	**3**	**2**					
2000-2004	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**				
2005-2006	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**			
2007+	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**		

Section 2: GVWR 26,000 pounds or less

Regulatory Requirements

GVWR	Engine Model Years	Compliance Date	BACT Requirement
26,000 pounds or less	1995 & older	January 1, 2015	2010 model year emission equivalent
	1996	January 1, 2016	
	1997	January 1, 2017	
	1998	January 1, 2018	
	1999	January 1, 2019	
	2003 & older	January 1, 2020	
	2004-2006	January 1, 2021	
	2007+	January 1, 2023	

Potential Funding

NOx & PM Eligibility												
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Engine model years in compliance →	none	none	none	none	1995 & older	1996 & older	1997 & older	1998 & older	1999 & older	2003 & older	2006 & older	2006 & older
Engine model year for funding ↓												
1995 & older	**3**	**2**										
1996	**4**	**3**	**2**									
1997	**5**	**4**	**3**	**2**								
1998	**6**	**5**	**4**	**3**	**2**							
1999	**7**	**6**	**5**	**4**	**3**	**2**						
2003 & older	**8**	**7**	**6**	**5**	**4**	**3**	**2**					
2004-2006	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**				
2007+	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**		

FLEETS OF 4-10 VEHICLES

Section 1: GVWR over 26,000 pounds

Regulatory Requirements

GVWR	Engine Model Years	Compliance Date Install PM Filter by	Compliance Date 2010 Engine by
Over 26,000 pounds	1993 & older	none	January 1, 2015
	1994-1995	none	January 1, 2016
	1996-1999	January 1, 2012	January 1, 2020
	2000-2004	January 1, 2013	January 1, 2021
	2005-2006	January 1, 2014	January 1, 2022
	2007+	January 1, 2014 if not originally equipped	January 1, 2023

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Potential Funding

PM Eligibility												
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Engine model years in compliance →	none	1996-1999	2000-2004	2005-2007	1993 & older	1994-1995	all	all	all	all	all	all
Engine model year for funding ↓												
1993 & older	**3**											
1994-1995	**4**	**3**										

NOx Eligibility												
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Engine model years in compliance →	none	none	none	none	1993 & older	1995 & older	1995 & older	1995 & older	1995 & older	1999 & older	2004 & older	2006 & older
Engine model year for funding ↓												
1993 & older	**3**											
1994-1995	**4**	**3**										
1996-1999	**8**	**7**	**6**	**5**	**4**	**3**						
2000-2004	**9**	**8**	**7**	**6**	**5**	**4**	**3**					
2005-2006	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**				
2007+	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**			

Section 2: GVWR 26,000 pounds or less

Regulatory Requirements

- Same as requirements for fleets of 1-3 vehicles with GVWR 26,000 pounds or less

Potential Funding

NOx & PM Eligibility												
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Engine model years in compliance →	none	none	none	none	1995 & older	1996 & older	1997 & older	1998 & older	1999 & older	2003 & older	2006 & older	2006 & older
Engine model year for funding ↓												
1995 & older	**3**											
1996	**4**	**3**										
1997	**5**	**4**	**3**									
1998	**6**	**5**	**4**	**3**								
1999	**7**	**6**	**5**	**4**	**3**							
2003 & older	**8**	**7**	**6**	**5**	**4**	**3**						
2004-2006	**9**	**8**	**7**	**6**	**5**	**4**	**3**					
2007+	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**			

ALTERNATIVE PHASE-IN FUNDING OPTION

Regulatory Requirements

This funding option is based on the phase-in option included in the California Code of Regulations, title 13, section (2025(i)), and is only available to fleets that choose this option and meet the applicable reporting requirements prior to pre-inspection. This alternative phase-in regulatory option is open to any fleet size.

GVWR	Compliance Date	Percent of Total Fleet Complying with PM BACT
Over 26,000 pounds	January 1, 2012	30%
	January 1, 2013	60%
	January 1, 2014	90%
	January 1, 2015	90%
	January 1, 2016	All vehicles comply with 2025(g)*

*The regulatory requirements of California Code of Regulations, title 13, section 2025(g) include requirements for 2010 engines by the following dates:

- Engine model year 1995 and older by 1/1/2016,
- Engine model year 1996-1999 by 1/1/2020,
- Engine model year 2000-2004 by 1/1/2021,
- Engine model year 2005-2006 by 1/1/2022, and
- Engine model year 2007 or newer by 1/1/2023.

Potential Funding

Section 1: Fleets of 1-3 vehicles

- If the fleet calculation is not equal to a whole number, round up to a whole number when the fraction is equal to or greater than 0.5, and round down if less than 0.5.

PM Eligibility												
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
BACT compliance →	0%	30%	60%	90%	90%	All vehicles comply with 2025(g)						
Portion of fleet eligible for funding ↓												
40% of fleet	**2**											
10% of fleet	**4**	**3**	**2**									

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NOx Eligibility												
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Engine model years in compliance →	none	none	none	none	none	1995 & older	1995 & older	1995 & older	1995 & older	1999 & older	2004 & older	2006 & older
Engine model year for funding ↓												
1995 & older	**4**	**3**	**2**									
1996-1999	**8**	**7**	**6**	**5**	**4**	**3**	**2**					
2000-2004	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**				
2005-2006	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**			
2007+	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**		

Section 2: Fleets of 4-10 vehicles

- If the fleet calculation is not equal to a whole number, round up to a whole number when the fraction is equal to or greater than 0.5, and round down if less than 0.5.

PM Eligibility												
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
BACT compliance →	0%	30%	60%	90%	90%	All vehicles comply with 2025(g)						
Portion of fleet eligible for funding ↓												
10% of fleet	**4**	**3**										

NOx Eligibility												
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Engine model years in compliance →	none	none	none	none	none	1995 & older	1995 & older	1995 & older	1995 & older	1999 & older	2004 & older	2006 & older
Engine model year for funding ↓												
1995 & older	**4**	**3**										
1996-1999	**8**	**7**	**6**	**5**	**4**	**3**						
2000-2004	**9**	**8**	**7**	**6**	**5**	**4**	**3**					
2005-2006	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**				
2007+	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**			

AGRICULTURAL VEHICLES

Regulatory Requirements

GVWR	Engine Model Year	Maximum Annual Mileage	Compliance Date	
			PM Filter	2010 Engine
over 26,000 pounds	All model years	10,000	-	1/1/2023
	1993 & older	15,000	-	1/1/2017
	1994-1995	15,000	-	1/1/2017
	1996-1999	20,000	1/1/2017	1/1/2020
	2000-2004	20,000	1/1/2017	1/1/2021
	2005	20,000	1/1/2017	1/1/2022
	2006	25,000	1/1/2017	1/1/2022
	2007+	25,000	1/1/2017	1/1/2023
under 26,001 pounds	All model years	10,000	none	1/1/2023
	1995 & older	15,000	none	1/1/2017
	1996-1997	20,000	none	1/1/2017
	1998	20,000	none	1/1/2018
	1999	20,000	none	1/1/2019
	2000-2003	20,000	none	1/1/2020
	2004-2005	20,000	none	1/1/2021
	2006	25,000	none	1/1/2021
	2007+	25,000	none	1/1/2023

Potential Funding

Section 1: Fleets of 1-3 vehicles

PM Eligibility														
GVWR	Engine Model Year	Maximum Annual Mileage	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
over 26,000 pounds	All	10,000	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**		
	93 & older	15,000	**5**	**4**	**3**	**2**								
	1994-1995	15,000	**5**	**4**	**3**	**2**								
	1996-1999	20,000	**5**	**4**	**3**	**2**								
	2000-2004	20,000	**5**	**4**	**3**	**2**								
	2005	20,000	**5**	**4**	**3**	**2**								
	2006	25,000	**5**	**4**	**3**	**2**								
	2007+	25,000	**5**	**4**	**3**	**2**								

NOx Eligibility

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GVWR	Engine Model Year	Maximum Annual Mileage	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
over 26,000 pounds	All	10,000	11	10	9	8	7	6	5	4	3	2		
	93 & older	15,000	5	4	3	2								
	1994-1995	15,000	5	4	3	2								
	1996-1999	20,000	8	7	6	5	4	3	2					
	2000-2004	20,000	9	8	7	6	5	4	3	2				
	2005	20,000	10	9	8	7	6	5	4	3	2			
	2006	25,000	10	9	8	7	6	5	4	3	2			
	2007+	25,000	11	10	9	8	7	6	5	4	3	2		

PM & NOx Eligibility														
GVWR	Engine Model Year	Maximum Annual Mileage	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
under 26,001 pounds	All	10,000	11	10	9	8	7	6	5	4	3	2		
	95 & older	15,000	5	4	3	2								
	1996-1997	20,000	5	4	3	2								
	1998	20,000	6	5	4	3	2							
	1999	20,000	7	6	5	4	3	2						
	2000-2003	20,000	8	7	6	5	4	3	2					
	2004-2005	20,000	9	8	7	6	5	4	3	2				
	2006	25,000	9	8	7	6	5	4	3	2				
	2007+	25,000	11	10	9	8	7	6	5	4	3	2		

Section 2: Fleets of 4-10 vehicles

PM Eligibility														
GVWR	Engine Model Year	Maximum Annual Mileage	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
over 26,000 pounds	All	10,000	11	10	9	8	7	6	5	4	3			
	93 & older	15,000	5	4	3									
	1994-1995	15,000	5	4	3									
	1996-1999	20,000	5	4	3									
	2000-2004	20,000	5	4	3									
	2005	20,000	5	4	3									
	2006	25,000	5	4	3									
	2007+	25,000	5	4	3									

NOx Eligibility														
GVWR	Engine Model Year	Maximum Annual Mileage	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Over 26,000 pounds	All	10,000	11	10	9	8	7	6	5	4	3			
	93 & older	15,000	5	4	3									
	1994-1995	15,000	5	4	3									
	1996-1999	20,000	8	7	6	5	4	3						
	2000-2004	20,000	9	8	7	6	5	4	3					
	2005	20,000	10	9	8	7	6	5	4	3				
	2006	25,000	10	9	8	7	6	5	4	3				
	2007+	25,000	11	10	9	8	7	6	5	4	3			

PM & NOx Eligibility														
GVWR	Engine Model Year	Maximum Annual Mileage	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Under 26,001 pounds	All	10,000	11	10	9	8	7	6	5	4	3			
	95 & older	15,000	5	4	3									
	1996-1997	20,000	5	4	3									
	1998	20,000	6	5	4	3								
	1999	20,000	7	6	5	4	3							
	2000-2003	20,000	8	7	6	5	4	3						
	2004-2005	20,000	9	8	7	6	5	4	3					
	2006	25,000	9	8	7	6	5	4	3					
	2007+	25,000	11	10	9	8	7	6	5	4	3			

LOW-MILEAGE CONSTRUCTION TRUCKS & VEHICLES THAT OPERATE EXCLUSIVELY IN NOx EXEMPT AREAS

Regulatory Requirements

GVWR	Compliance Date	Percent of Total Fleet Complying with PM BACT
Over 26,000 pounds	January 1, 2014	33%
	January 1, 2015	66%
	January 1, 2016	All vehicles comply with 2025(g)*

*The regulatory requirements of California Code of Regulations, title 13, section 2025(g) include requirements for 2010 engines by the following dates:

- Engine model year 1995 and older by 1/1/2016
- Engine model year 1996-1999 by 1/1/2020
- Engine model year 2000-2004 by 1/1/2021
- Engine model year 2005-2006 by 1/1/2022
- Engine model year 2007 or newer by 1/1/2023

Potential Funding

Section 1: Fleets of 1-3 vehicles

- If the fleet calculation is not equal to a whole number, round up to a whole number when the fraction is equal to or greater than 0.5, and round down if less than 0.5.

PM Eligibility												
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
BACT compliance →	0%	0%	0%	33%	66%	All vehicles comply with 2025(g)						
Portion of fleet eligible for funding ↓												
66% of fleet	**2**											
33% of fleet	**3**	**2**										

NOx Eligibility												
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Engine model years in compliance →	none	none	none	none	none	1995 & older	1995 & older	1995 & older	1995 & older	1999 & older	2004 & older	2006 & older
Engine model year for funding ↓												
1995 & older	**4**	**3**	**2**									
1996-1999	**8**	**7**	**6**	**5**	**4**	**3**	**2**					
2000-2004	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**				
2005-2006	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**			
2007+	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**		

Section 2: Fleets of 4-10 vehicles

- If the fleet calculation is not equal to a whole number, round up to a whole number when the fraction is equal to or greater than 0.5, and round down if less than 0.5.

PM Eligibility												
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
BACT compliance →	0%	0%	0%	33%	66%	All vehicles comply with 2025(g)						
Portion of fleet eligible for funding ↓												
33% of fleet	**3**											

NOx Eligibility												
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Engine model years in compliance →	none	none	none	none	none	1995 & older	1995 & older	1995 & older	1995 & older	1999 & older	2004 & older	2006 & older
Engine model year for funding ↓												
1995 & older	**4**	**3**										
1996-1999	**8**	**7**	**6**	**5**	**4**	**3**						
2000-2004	**9**	**8**	**7**	**6**	**5**	**4**	**3**					
2005-2006	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**				
2007+	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**			

LOG TRUCKS

Regulatory Requirements

- This funding option is based on the phase-in option included in the Regulation (2025(m)(11)), and is only available for log trucks that choose this option and meet the applicable reporting requirements prior to pre-inspection.
- This alternative phase-in regulatory option is open to any fleet size.

GVWR	Compliance Date	Percent of Total Fleet Complying with BACT	BACT Requirements
Over 33,000 pounds	January 1, 2014	10%	2010 model year engine
	January 1, 2015	20%	
	January 1, 2016	30%	
	January 1, 2017	40%	
	January 1, 2018	50%	
	January 1, 2019	60%	
	January 1, 2020	70%	
	January 1, 2021	80%	
	January 1, 2022	90%	
	January 1, 2023	100%	

Potential Funding

- If the fleet calculation is not equal to a whole number, round up to a whole number when the fraction is equal to or greater than 0.5, and round down if less than 0.5.

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Section 1: Fleets of 1-3 vehicles

PM & NOx Eligibility												
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
BACT compliance →	0%	0%	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%
Portion of fleet eligible for funding ↓												
100 %	2											
90%	3	2										
80%	4	3	2									
70%	5	4	3	2								
60%	6	5	4	3	2							
50%	7	6	5	4	3	2						
40%	8	7	6	5	4	3	2					
30%	9	8	7	6	5	4	3	2				
20%	10	9	8	7	6	5	4	3	2			
10%	11	10	9	8	7	6	5	4	3	2		

Section 2: Fleets of 4-10 vehicles

PM & NOx Eligibility												
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
BACT compliance →	0%	0%	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%
Portion of fleet eligible for funding ↓												
90% of fleet	**3**											
80% of fleet	**4**	**3**										
70% of fleet	**5**	**4**	**3**									
60% of fleet	**6**	**5**	**4**	**3**								
50% of fleet	**7**	**6**	**5**	**4**	**3**							
40% of fleet	**8**	**7**	**6**	**5**	**4**	**3**						
30% of fleet	**9**	**8**	**7**	**6**	**5**	**4**	**3**					
20% of fleet	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**				
10% of fleet	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**			

Projects Subject to the Solid Waste Collection Vehicle Rule

- *Solid Waste Collection Vehicles (SWCV) AKA: standard residential collection vehicles.*
- *Final compliance deadline is December 31, 2010.*
- *Rule impacts diesel engines, model years 1960-2006.*
- *Rule requires owners to maintain compliance records on-site and make available to ARB upon request.*
- *Transfer trucks are subject to the Statewide Truck & Bus Regulation.*
- *Funding is open to any fleet size.*
- *The applicant must submit a signed Declaration of Compliance form at the time of application.*
- *The applicant must provide to the air district a statement of compliance with the Solid Waste Collection Vehicle Rule no later than the time of pre-inspection.*
    - *Districts may contact ARB to verify compliance status. Questions regarding SWCV compliance may be referred to Utpala Ramesh of ARB at (626) 575-6772 or uramesh@arb.ca.gov. Written verification must be kept in the project file.*
- *Districts will not be held liable if applicants falsify compliance information.*
- *Districts must conduct a compliance check to determine if the applicant has any outstanding violations.*
- *Regulatory information can be found at: http://www.arb.ca.gov/msprog/swcv/swcv.htm*

Potential Funding

PM reductions are not surplus. If the baseline vehicle does not already comply, the baseline cost must incorporate the cost of a PM-only retrofit that would be necessary for compliance.

Projects Subject to the Fleet Rule for Public Agencies and Utilities

- *Rule has separate compliance deadlines for Low Population Counties and High Population Counties.*
- *Low Population fleets have two options for compliance (accelerated fleet turn over or BACT). Low Population fleets must declare early which compliance path will be followed before receiving funding.*
- *Rule impacts diesel engines, model years 1960-2006.*
- *Rule requires PM-only reductions; NOx and ROG are not regulated.*
- *NOx and ROG reductions are surplus.*
- *School Buses are not subject to this regulation.*
- *Federal fleets are not subject to this regulation.*
- *Rule requires owners to maintain compliance records on-site and make available to ARB upon request.*
- *Compliance (phased in BACT) for the Public Fleets will be determined by reviewing BACT on each engine of the total fleet owned by the municipality (i.e. department, special district, city, county etc.) or utility.*
- *The applicant must submit a signed Declaration of Compliance form at the time of application.*
- *The applicant must provide to the air district a statement of compliance with the Fleet Rule for Public Agencies and Utilities no later than the time of pre-inspection. A sample Statement of Compliance is included in the recordkeeping forms at the following website: http://www.arb.ca.gov/msprog/publicfleets/compliancetools.htm.*
    - *Districts may contact ARB to verify compliance status. Questions regarding compliance can be directed to Eloy Florez of ARB at (626) 350-6525 or at eflorez@arb.ca.gov. Written verification must be kept in the project file.*
- *Districts will not be held liable if applicants falsify compliance information.*
- *Districts must conduct a compliance check to determine if the applicant has any outstanding violations.*
- *Regulatory information can be found at: http://www.arb.ca.gov/msprog/publicfleets/publicfleets.htm*

Potential Funding

If PM is not surplus, the baseline cost must incorporate the cost of a PM-only retrofit that would be necessary for compliance.

LOW POPULATION COUNTIES REGULAR COMPLIANCE SCHEDULE

Group 1: Engine Model Years 1960-1987

Regulatory Requirements

Group	Engine Model Years	Percentage of Group to Use Best Available Control Technology	Compliance Deadline
1	1960-1987	20 40 60 80 100	December 31, 2009 December 31, 2011 December 31, 2013 December 31, 2015 December 31, 2017

Potential Funding

PM Eligibility							
	2011	2012	2013	2014	2015	2016	2017
BACT compliance →	20%	40%	40%	60%	60%	80%	80%
Portion of group eligible for funding ↓							
80% of Group							
60% of Group							
40% of Group	**4**	**3**					
20% of Group	**6**	**5**	**4**	**3**			

Group 2: Engine Model Years 1988-2002

Regulatory Requirements

Group	Engine Model Years	Percentage of Group to Use Best Available Control Technology	Compliance Deadline
2	1988-2002	20 40 60 80 100	December 31, 2008 December 31, 2010 December 31, 2012 December 31, 2014 December 31, 2016

Potential Funding

PM Eligibility						
	2011	2012	2013	2014	2015	2016
BACT compliance →	40%	40%	60%	60%	80%	80%
Portion of group eligible for funding ↓						
60% of Group						
40% of Group	**3**					
20% of Group	**5**	**4**	**3**			

Group 3: Engine Model Years 2003-2006

Regulatory Requirements

Group	Engine Model Years	Percentage of Group to Use Best Available Control Technology	Compliance Deadline
3	2003-2006 (Includes dual-fuel and bi-fuel engines)	20 40 60 80 100	December 31, 2011 December 31, 2012 December 31, 2013 December 31, 2014 December 31, 2015

Potential Funding

PM Eligibility					
	2011	2012	2013	2014	2015
BACT compliance →	0%	20%	40%	60%	80%
Portion of group eligible for funding ↓					
100% of Group					
80% of Group					
60% of Group					
40% of Group	**3**				
20% of Group	**4**	**3**			

LOW POPULATION COUNTIES ACCELERATED TURN OVER OPTION

Regulatory Requirements

Engine Model Year	Fleet Percent to Repower with a 1994 or newer engine	Compliance Date as of Dec 31st	Percent of Fleet to use BACT	Compliance Date as of Dec 31st
1960 –1993	100%	2020	100%	2025
1994 - 2006	N/A	N/A	100%	2025

Potential Funding

Repowers & Fleet Modernization

PM Eligibility										
Vehicles Eligible for Funding	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
100% of Group	**9**	**8**	**7**	**6**	**5**	**4**	**3**			

Retrofits

PM Eligibility						
Vehicles Eligible for Funding	2020	2021	2022	2023	2024	2025
100% of Group	**5**	**4**	**3**			

HIGH POPULATION COUNTIES

- No PM reduction funding opportunities remain for vehicles in high population counties.

- Privately-owned utility vehicles will be subject to the Truck and Bus Regulation after they comply with PM BACT for their entire fleet under the Fleet Rule for Public Agencies and Utilities. Potential NOx funding for these vehicles shall be based on reductions that are surplus to the Truck and Bus Regulation.

Projects Subject to the Fleet Rule for Transit Agencies
Urban Bus Projects

- *Regulation requires agencies on an alternative fuel path and agencies on a diesel fuel path to meet NOx and PM fleet averages.*
- *Transit agencies are required to submit compliance reports to ARB annually and compliance (fleetwide reduction calculations) for the urban buses is determined by reviewing the fleetwide averages and reductions of the total urban buses, including spares, providing fixed route service for that transit agency.*
- *The applicant must submit a signed Declaration of Compliance form at the time of application.*
- *The applicant must provide to the air district a statement of compliance with the Fleet Rule for Transit Agencies no later than the time of pre-inspection. A copy of the most recent compliance report submitted to ARB is acceptable.*
    - *Districts may contact ARB to verify compliance status. Regulatory compliance may be confirmed with Eric Bissinger of ARB at (916) 324-9424 or at ebissinger@arb.ca.gov. Written verification must be kept in the project file.*
- *Districts will not be held liable if applicants falsify compliance information.*
- *Districts must conduct a compliance check to determine if the applicant has any outstanding violations.*
- *Regulatory information can be found at: http://www.arb.ca.gov/msprog/bus/frmlregdocuments.htm.*

Eligible Projects

PM reductions are not surplus, because the rule requires a fleetwide PM reduction of 85% or a fleetwide average of 0.01 g/bhp-hr. Therefore, if the vehicle is not already in compliance with PM requirements, the baseline cost must incorporate the cost of a PM-only retrofit that would be necessary for compliance.

Transit Agencies Established Through 12/31/04

Regulatory Requirements

- Fleet wide NOx emissions cannot exceed 4.8 g/bhp-hr.
- Applies to diesel and alternative fuel compliance path

Potential Funding

- Once final fleet wide requirements have been met, NOx funding opportunities do not expire. See 2011 Guidelines for maximum project life.

Fleet wide NOx emissions	2011+
4.8 g/bhp-hr	**Maximum project life**

Transit Agencies Established After 1/1/05

Regulatory Requirements

- Fleet wide NOx emissions cannot exceed 4.0 g/bhp-hr
- Applies to diesel and alternative fuel compliance path

Potential Funding

- Once final fleet wide requirements have been met, NOx funding opportunities do not expire. See 2011 Guidelines for maximum project life

Fleet wide NOx emissions	2011+
4.0 g/bhp-hr	**Maximum project life**

Projects Subject to the Fleet Rule for Transit Agencies
Transit Fleet Vehicle Projects

- *Regulation requires agencies to meet NOx and PM fleet averages.*
- *Transit agencies are required to submit compliance reports to ARB annually and compliance (fleetwide reduction calculations) for the transit fleet vehicles are determined by reviewing the fleetwide averages and reductions of the total transit fleet vehicles, including spares, providing fixed route service for that transit agency.*
- *The applicant must submit a signed Declaration of Compliance form at the time of application.*
- *The applicant must provide to the air district a statement of compliance with the Fleet Rule for Transit Agencies no later than the time of pre-inspection. A copy of the most recent compliance report submitted to ARB is acceptable.*
    - *Districts may contact ARB to verify compliance status. Regulatory compliance may be confirmed with Eric Bissinger of ARB at (916) 324-9424 or at ebissinger@arb.ca.gov. Written verification must be kept in the project file.*
- *Districts will not be held liable if applicants falsify compliance information.*
- *Districts must conduct a compliance check to determine if the applicant has any outstanding violations.*
- *Regulatory information can be found at: http://www.arb.ca.gov/msprog/bus/frmlregdocuments.htm.*

Eligible Projects

PM reductions are not surplus, because the rule requires fleetwide PM reduction of 85% or a fleetwide average of 0.01 g/bhp-hr. Therefore, if the vehicle is not already in compliance with PM requirements, the baseline cost must incorporate the cost of a PM-only retrofit that would be necessary for compliance.

Regulatory Requirements

- Fleet wide NOx emissions cannot exceed 2.4 g/bhp-hr.

Potential Funding

- Once final fleet wide requirements have been met, NOx funding opportunities do not expire. See 2011 Guidelines for maximum project life.

Fleet wide NOx emissions	2011+
≤2.4 g/bhp-hr	**Maximum project life**

Projects Subject to the Statewide Drayage Truck Regulation

- *Regulation affects diesel vehicles (including dray-off vehicles) over 26,000 GVWR.*
- *Separate compliance requirements apply for Class 7 (26,001-33,000 GVWR) and Class 8 (33,001+ GVWR) vehicles.*
- *Most vehicles have NOx and PM requirements; there are no ROG requirements.*
- *ROG reductions are surplus.*
- *Funded projects may not be used for compliance extensions, delays or regulatory credit.*
- *Most vehicles are also subject to the Statewide Truck and Bus Regulation, and funding must be surplus to each applicable regulation.*
- *Starting January 1, 2017, all drayage trucks must comply with the Truck and Bus Regulation.*
- *The applicant must submit a signed Declaration of Compliance form at the time of application.*
- *The applicant must provide to the air district a statement of compliance with the Drayage Truck Regulation no later than the time of pre-inspection. A printout from the ARB Drayage Truck Registry (DTR) showing that the baseline truck is "compliant" is acceptable. The DTR can be accessed at: https://arber.arb.ca.gov/publicDtrSearch.arb. Questions regarding the DTR may be addressed to Jesica Johnston of ARB at (916) 327-5608 or jjohnsto@arb.ca.gov.*
- *Districts will not be held liable if applicants falsify compliance information.*
- *Districts must conduct a compliance check to determine if the applicant has any outstanding violations.*
- *Regulatory information can be found at: http://www.arb.ca.gov/msprog/onroad/porttruck/porttruck.htm.*

Regulatory Requirements

Class 8 Compliance Schedule (33,000+ GVWR)	
Truck Engine Model Year	**Emission Requirements**
1993 and Older	Prohibited by December 31, 2009
1994 thru 2003	After December 31, 2009, reduce PM emissions by 85% and After December 31, 2013, meet 2007 engine emission standard
2004	After December 31, 2011, reduce PM emissions by 85% and After December 31, 2013 , meet 2007 engine emission standard
2005 and 2006	After December 31, 2012, reduce PM emissions by 85% and After December 31, 2013, meet 2007 engine emission standard
2007-2009	Compliant through 2023
2010 and Newer	Fully compliant

Class 7 Compliance Schedule (26,001-33,000 GVWR)	
Truck Engine Model Year	**Emission Requirements**
1993 and Older	Prohibited
1994 thru 2006 while operating in the South Coast Air Basin	After December 31, 2011, reduce PM emissions by 85% and After December 31, 2013, meet 2007 engine emission standard
1994 thru 2006	After December 31, 2013, meet 2007 engine emission standard
2007 thru 2009	Compliant through 2023
2010 and Newer	Fully compliant

Potential Funding

Section 1: Fleets of 1-3 Vehicles; 26,001-33,000 GVWR (Class 7)

- Until January 1, 2017, the incremental NOx benefit between 1.2 g/bhp-hr and 0.20 g/bhp-hr is surplus for all vehicles subject to the Drayage Truck Regulation. See regulatory requirements for Truck and Bus Regulation for additional NOx surplus criteria.

PM Eligibility													
GVWR	Engine Model Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
26,001-33,000 pounds	1994-2006*	**2**											
	2007-2009	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**		
	2010 and newer	**Maximum project life**											

* Except vehicles operating in the South Coast Air Basin

NOx Eligibility													
GVWR	Engine Model Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
26,001-33,000 pounds	1994-2006	**2**											
	2007-2009	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**		
	2010 and newer	**Maximum project life**											

Section 2: Fleets of 1-3 Vehicles; 33,001+ GVWR (Class 8)

- No remaining surplus PM funding options.
- Until January 1, 2017, the incremental NOx benefit between 1.2 g/bhp-hr and 0.20 g/bhp-hr is surplus for all vehicles. See regulatory requirements for Truck and Bus Regulation for additional NOx surplus criteria.

NOx Eligibility
same as Section 1 above

Section 3: Fleets of 4-10 Vehicles; 26,001+ GVWR (Class 7 & 8)

- No remaining surplus PM funding options.
- Until January 1, 2017, the incremental NOx benefit between 1.2 g/bhp-hr and 0.20 g/bhp-hr is surplus for all vehicles. See regulatory requirements for Truck and Bus Regulation for additional NOx surplus criteria. No other NOx funding options remain.

Projects Subject to the In-Use Off-Road Diesel Vehicle Regulation

- *Rule is applicable to any person, business or government agency who owns or operates within California any diesel-fueled or alternative diesel fueled off-road compression ignition vehicle engine 25 horsepower or greater as specified in Title 13, California Code of Regulations, Section 2449(b).*
- *Rule requires reporting to ARB starting April 1, 2009 for large fleets, June 1, 2009 for medium fleets and August 1, 2009 for small fleets. Fleet owners must maintain copies of reporting records on-site and make available to ARB upon request within five business days. Owners must demonstrate compliance to ARB and submit reports annually.*
- *Two year minimum project life for small fleets; medium and large fleets have a three year minimum project life.*
- *Funded projects may not be used for compliance extensions, delays, or regulatory credit for the duration of the project life.*
- *For the purpose of determining eligibility for Carl Moyer funding, compliance for the in-use off-road regulation will be determined by reviewing all engines owned fleet wide.*
- *The applicant must submit a signed Declaration of Compliance form at the time of application.*
- *The applicant must provide a statement of compliance or copies of compliance reports to the district no later than the time of pre-inspection. Applicants must supply to the district, for the entire fleet subject to this regulation, reporting information as described in Title 13, California Code of Regulations, Section 2449(g)(1) and (2)(A), and the most recent ARB Certificate of Reported Compliance, per Title 13, California Code of Regulations, Section 2449(l), if applicable. Written confirmation of compliance from ARB must be maintained in the district's files.*
- *Districts are not liable if applicants falsify reports.*
- *Questions regarding compliance can be directed to ARB at doors@arb.ca.gov or by calling 1-877-59-DOORS.*
- *Regulatory information can be found at: http://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm. Questions can be directed to the diesel vehicle information hot line at (866) 6-DIESEL or (866) 634-3735.*

Large Fleets

Regulatory Requirements

Fleets must meet the fleet average requirements before January 1 of each year or demonstrate that it meets the BACT requirements.

Percentage of Total Horsepower in Fleet to Use Best Available Control Technology	Compliance Deadline
4.8	January 1, 2014
12.8	January 1, 2015
20.8	January 1, 2016
28.8	January 1, 2017
38.8	January 1, 2018
48.8	January 1, 2019
58.8	January 1, 2020
68.8	January 1, 2021
78.8	January 1, 2022
88.8	January 1, 2023

Potential Funding

- After December 31, 2016, funding is no longer available for large fleets.
- After December 31, 2012, engines >75 horsepower are eligible only for filter-based projects.
- After December 31, 2013, engines <75 horsepower are eligible only for filter-based projects.
- The amount of horsepower eligible for funding depends upon the fleet's compliance relative to the BACT requirements.

This document is for informational purposes only.
ARB/Air districts will determine project eligibility.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
BACT % ➔ to be eligible for funding	**0**	**0**	**0**	**4.8%**	**12.8%**	**20.8%**						
Equipment Eligible for funding ➔ (percent of hp)												
100%												
95.2%	**3**											
87.2%	**4**	**3**										
79.2%	**5**	**4**	**3**									
71.2%	**6**	**5**	**4**	**3**								
61.2%	**7**	**6**	**5**	**4**	**3**							
51.2%	**8**	**7**	**6**	**5**	**4**	**3**						
41.2%	**9**	**8**	**7**	**6**	**5**	**4**						

- Prior to 1/1/2012, fleet does not need to show compliance, and Moyer can fund up to 95.2 percent of hp.
- Prior to 1/1/2013, fleet does not need to show compliance, and Moyer can fund up to 87.2 percent of hp.
- Prior to 1/1/2014, fleet does not need to show compliance, and Moyer can fund up to 79.2 percent of hp.
- Prior to 1/1/2015, fleet must show compliance with the 2014 requirements (4.8 percent of hp), and Moyer can fund up to 71.2 percent of hp.
- Prior to 1/1/2016, fleet must show compliance with the 2015 requirements (12.8 percent of hp), and Moyer can fund up to 61.2 percent of hp.
- Prior to 1/1/2017, fleet must show compliance with the 2016 requirements (20.8 percent of hp), and Moyer can fund up to 51.2 percent of hp.
- If the projects are installed and in operation any time after 1/1/2017 then they are not eligible for funding.

Medium Fleets

Regulatory Requirements

Fleets must meet the fleet average requirements before January 1 of each year or demonstrate that it meets the BACT requirements.

Percentage of Total Horsepower in Fleet to Use Best Available Control Technology	Compliance Deadline
8	January 1, 2017
18	January 1, 2018
28	January 1, 2019
38	January 1, 2020
48	January 1, 2021
58	January 1, 2022
68	January 1, 2023

Potential Funding

- Funding opportunities remain for medium fleets through December 31, 2019, after which funding is only available for fleets that show compliance with the 2023 regulatory compliance requirements.
- The amount of horsepower eligible for funding depends upon the fleet's compliance relative to the BACT requirements.

This document is for informational purposes only.
ARB/Air districts will determine project eligibility.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
BACT % ➔ to be eligible for funding	**0**	**0**	**0**	**0**	**0**	**0**	**8%**	**18%**	**28%**	**68%**	**68%**	**68%**
Equipment Eligible for funding ➔ (percent of hp)												
100%	**5**	**4**	**3**									
100%	**5**	**4**	**3**									
100%	**5**	**4**	**3**									
92%	**6**	**5**	**4**	**3**								
82%	**7**	**6**	**5**	**4**	**3**							
72%	**8**	**7**	**6**	**5**	**4**	**3**						
62%	**9**	**8**	**7**	**6**	**5**	**4**	**3**					
52%	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**				
42%	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**			

- Prior to 1/1/2014, the fleet does not need to show compliance, and Moyer can fund up to 100 percent of hp.
- Prior to 1/1/2015, the fleet does not need to show compliance, and Moyer can fund up to 92 percent of hp.
- Prior to 1/1/2016, the fleet does not need to show compliance, and Moyer can fund up to 82 percent of hp.
- Prior to 1/1/2017, the fleet does not need to show compliance, and Moyer can fund up to 72 percent of hp.
- Prior to 1/1/2018, the fleet most show compliance with the 2017 requirements (8 percent of hp), and Moyer can fund up to 62 percent of hp.
- Prior to 1/1/2019, the fleet must show compliance with the 2018 requirements (18 percent of hp), and Moyer can fund up to 52 percent of hp.
- Prior to 1/1/2020, the fleet must show compliance with the 2019 requirements (28 percent of hp), and Moyer can fund up to 42 percent of hp.
- On 1/1/2020, and after, fleet must meet the final compliance requirements (68 percent of hp), in order to be eligible for Carl Moyer Program funding.

Small Fleets

Regulatory Requirements

Fleets must meet the fleet average requirements before January 1 of each year or demonstrate that it meets the BACT requirements. Funding eligibility based upon the BACT requirements.

Percentage of Total Horsepower in Fleet to Use Best Available Control Technology	Compliance Deadline
10	January 1, 2019
20	January 1, 2020
30	January 1, 2021
40	January 1, 2022
50	January 1, 2023
60	January 1, 2024
70	January 1, 2025
80	January 1, 2026
90	January 1, 2027
100	January 1, 2028

Potential Funding

- Funding opportunities remain for small fleets through December 31, 2025, after which funding is only available for fleets that show compliance with the 2028 regulatory compliance requirements.
- The amount of horsepower eligible for funding depends upon the fleet's compliance relative to the BACT requirements.

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
BACT % ➔ to be eligible for funding	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10%**	**20%**	**30%**	**40%**	**50%**	**60%**	**70%**	**100%**	**100%**
Equipment Eligible for funding ↓ (percent of hp)																
100%	**6**	**5**	**4**	**3**	**2**											
100%	**6**	**5**	**4**	**3**	**2**											
90%	**7**	**6**	**5**	**4**	**3**	**2**										
80%	**8**	**7**	**6**	**5**	**4**	**3**	**2**									
70%	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**								
60%	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**							
50%	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**						
40%	**12**	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**					
30%	**13**	**12**	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**				
20%	**14**	**13**	**12**	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**			
10%	**15**	**14**	**13**	**12**	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**		

- Prior to 1/1/2017, fleet does not need to show compliance, and Moyer can fund up to 100 percent of hp.
- Prior to 1/1/2018, fleet does not need to show compliance, and Moyer can fund up to 90 percent of hp.
- Prior to 1/1/2019, fleet does not need to show compliance, and Moyer can fund up to 80 percent of hp.
- Prior to 1/1/2020, fleet must show compliance with 2019 requirements (10 percent of hp), and Moyer can fund up to 70 percent of hp.
- Prior to 1/1/2021, fleet must show compliance with 2020 requirements (20 percent of hp), and Moyer can fund up to 60 percent of hp.
- Prior to 1/1/2022, fleet must show compliance with 2021 requirements (30 percent of hp), and Moyer can fund up to 50 percent of hp.
- Prior to 1/1/2023, fleet must show compliance with 2022 requirements (40 percent of hp), and Moyer can fund up to 40 percent of hp.
- Prior to 1/1/2024, fleet must show compliance with 2023 requirements (50 percent of hp), and Moyer can fund up to 30 percent of hp.
- Prior to 1/12025, fleet must show compliance with 2024 requirements (60 percent of hp), and Moyer can fund for to 20 percent of hp.
- Prior to 1/1/2026, fleet must show compliance with 2025 requirements (70 percent of hp), and Moyer can fund for to 10 percent of hp.
- On 1/1/2026, and after, fleet must meet the final compliance requirements (100 percent of hp), in order to be eligible for Carl Moyer Program funding.

Projects Subject to the Large Spark-Ignition Equipment Regulation

- *Rule impacts operators of fleets of four or more forklifts, or fleets of four or more non forklift sweeper/scrubbers, industrial tow tractors and/or pieces of ground support equipment.*
- *The LSI rule requires fleet wide control of hydrocarbons plus oxides of nitrogen (HC + NOx).*
- *Rule requires owners to maintain compliance records on-site and make available to ARB upon request.*
- *Compliance will be determined based upon the fleet average standards in California Code of Regulations, title 13, section 2775.1(a) or for fleets used in agriculture crop preparation services, California Code of Regulations, title 13, section 2775.1(c).*
- *The applicant must submit a signed Declaration of Compliance form at the time of application.*
- *Statements of compliance or a copy of compliance records must be obtained from applicants no later than the time of pre-inspection. Potential large and medium fleet applicants must supply to the district for the entire fleet subject to this regulation records per California Code of Regulations, title 13, section 2775.2(b). Potential small fleet applicants must provide an affirmation that their fleet meets the definition of a small fleet per California Code of Regulations, title 13, section 2775 (an operator's aggregated operations in California of one to three forklifts and/or one to three pieces of non-forklift equipment).*
- *Districts are not liable if applicants falsify reports.*
- *Questions regarding compliance can be directed to the Off-Road LSI information hot line at 1-800-387-2992.*
- *Regulatory information can be found at: http://www.arb.ca.gov/msprog/offroad/orspark/orspark.htm*

Regulatory Requirements

Fleet Average Emission Level Standards
hydrocarbons plus oxides of nitrogen
in grams per kilowatt-hour (brake-horsepower-hour)

Fleet Type	Compliance Dates/HC+NOx Emission Levels		
	1/1/2009	1/1/2011	1/1/2013
Large Forklift Fleet	3.2 (2.4)	2.3 (1.7)	1.5 (1.1)
Medium Forklift Fleet	3.5 (2.6)	2.7 (2.0)	1.9 (1.4)
Non-forklift Fleet	4.0 (3.0)	3.6 (2.7)	3.4 (2.5)

Equipment that is exempt from LSI regulation

- Agricultural Crop Preparation pre-1990 year forklifts
- Agricultural Crop Preparation non-forklift equipment
- Forklifts used exclusively in field to harvest and maintain crops
- Non-forklift LSI equipment exempt from regulation regardless of fleet size: aerial lifts, lawn and commercial turf equipment, ice surface care equipment, mining and construction equipment
- LSI equipment impacted by regulation but in small fleets of 1-3 forklifts and/or 1-3 sweeper/scrubbers, industrial tow tractors, or airport ground support)

Potential Funding

Large Fleets and Medium Fleets, and Non-Forklift Fleets

In order to be eligible for funding, large and medium forklift fleets and fleets of four or more non-forklift LSI equipment must meet the final fleet average emission level applicable on January 1, 2013.

Fleet Average HC+NOx Emissions	2011+
≤1.1 g/bhp-hr (Large Fleet)	**Maximum project life**
≤1.4 g/bhp-hr (Medium Fleet)	**Maximum project life**
≤2.5 g/bhp-hr (Non-Forklift Fleet)	**Maximum project life**

Agricultural Crop Preparation Forklifts

Regulatory Requirements

Agricultural crop preparation forklifts have an alternative compliance plan in which the fleet is in compliance if it retrofit, repower or replaces, 100 percent of their fleet by January 1, 2012 or meets a fleet average of 3.0 g/bhp-hr. An agricultural crop preparation forklift fleet which has met this compliance level is eligible for funding.

Potential Funding

In accordance with SBx2 3, fleets that have retrofitted/repowered 20 percent of their fleet in compliance with the regulation are eligible for funding up to the final compliance date. These projects must be installed an in operation prior to the final compliance date of January 1, 2012.

Projects Subject to the Mobile Cargo Handling Equipment Regulation

- *Rule impacts any person who conducts business in California who sells, offers for sale, leases, rents, purchases, owns or operates any compression ignition mobile cargo handling equipment that operates at any California port or intermodal rail yard.*
- *Rule requires owners to maintain compliance records on-site and make available to ARB upon request. Owners must demonstrate compliance to ARB and submit reports annually.*
- *Funded projects may not be used for compliance extensions, delays, or regulatory credit for the duration of the project life.*
- *Compliance for the cargo handling equipment (CHE) will be determined by reviewing all engines owned at each terminal or intermodal yard location.*
- *The applicant must submit a signed Declaration of Compliance form at the time of application.*
- *Statements of compliance or copies of compliance reports must be obtained from applicants no later than the time of pre-inspection. Applicant must supply to the district for the entire fleet subject to this regulation, record keeping and reporting requirements as specified in California Code of Regulations, title 13, section 2479(i) and (j) for the most recent reporting requirement. Written confirmation of compliance from ARB must be maintained in the district's files.*
- *Districts are not liable if applicants falsify reports.*
- *Regulatory compliance must be confirmed with Michele Houghton of the ARB at (916) 327-5638 or at mhoughton@arb.ca.gov.*
- *Regulatory information can be found at: http://www.arb.ca.gov/ports/cargo/cargo.htm*

IN-USE YARD TRUCKS

Section 1: In-Use Yard Truck Fleets of Three or Less, Engine Certified to the On-Road Standard

Regulatory Requirements

Model Year	On-road engine **without** retrofit installed by December 31, 2006	On-road engine **with** retrofit installed by December 31, 2006
	Compliance Deadline	
Pre-2000	December 31, 2007	December 31, 2008
2000	December 31, 2008	December 31, 2009
2001	December 31, 2009	December 31, 2010
2002	December 31, 2010	December 31, 2011
2003	December 31, 2011	December 31, 2012
2004	December 31, 2012	December 31, 2013
2005	December 31, 2013	December 31, 2014
2006	December 31, 2014	December 31, 2015

Potential Funding

No funding opportunity available for the following project types:

- On-road engine model year 2004 and earlier with retrofit
- On-road engine model year 2005 and earlier without retrofit

Funding opportunities remain for the following project types:

- On-road engine model year 2005 with retrofit
- On-road engine model year 2006 without retrofit

Equipment eligible for funding	2011	2012	2013	2014
100% of group	**3**			

- On-road engine model year 2006 with retrofit

Equipment eligible for funding	2011	2012	2013	2014	2015
100% of group	**4**	**3**			

Section 2: In-Use Yard Truck Fleets of Three or Less, Engine Certified to Off-road Standard

Regulatory Requirement

Model Year	Off-road engine **without** retrofit installed by December 31, 2006	Off-road engine **with** retrofit installed by December 31, 2006
	Compliance Deadline	
Pre-2003	December 31, 2007	December 31, 2008
2003	December 31, 2010	December 31, 2011
2004	December 31, 2011	December 31, 2012
2005	December 31, 2012	December 31, 2013
2006	December 31, 2013	December 31, 2014

Potential Funding

No funding opportunity available for the following project types:

- Off-road engine model year 2005 and earlier with retrofit
- Off-road engine model year 2006 and earlier without retrofit

Funding opportunities remain for the following project types:

- On-road engine model year 2006 with retrofit

Equipment eligible for funding	2011	2012	2013	2014
100% of group	**3**			

Section 3: In-Use Yard Truck Fleets of Four or More, Engine Certified to On-road Standard Without VDECS installed by December 31, 2006

Regulatory Requirements

Model Year	Percentage of Group to Use Best Available Control Technology	On-road engine **without** retrofit installed by December 31, 2006
Pre-2000	25	December 31, 2007
	50	December 31, 2008
	100	December 31, 2009
2000	25	December 31, 2008
	50	December 31, 2009
	100	December 31, 2010
2001	25	December 31, 2009
	50	December 31, 2010
	100	December 31, 2011
2002	25	December 31, 2010
	50	December 31, 2011
	100	December 31, 2012
2003	25	December 31, 2011
	50	December 31, 2012
	100	December 31, 2013
2004	25	December 31, 2012
	50	December 31, 2013
	100	December 31, 2014
2005	25	December 31, 2013
	50	December 31, 2014
	100	December 31, 2015
2006	25	December 31, 2014
	50	December 31, 2015
	100	December 31, 2016

Potential Funding

No funding opportunity available for the following project types:

- On-road engine model year 2003 and earlier without retrofit

Funding opportunities remain for the following project types:

- On-road engine model year 2004 without retrofit

Equipment eligible for funding	2011	2012	2013	2014
50% of Group	3			

- On-road engine model year 2005 without retrofit

Equipment eligible for funding	2011	2012	2013	2014	2015
75% of Group	3				
50% of Group	4	3			

- On-road engine model year 2006 without retrofit

Equipment eligible for	2011	2012	2013	2014	2015	2016
100% of Group	3					
75% of Group	4	3				
50% of Group	5	4	3			

Section 4: In-Use Yard Truck Fleets of Four or More, Engine Certified to On-road Standard with VDECS installed by December 31, 2006

Regulatory Requirements

Model Year	Percentage of Group to Use Best Available Control Technology	On-road engine **with** retrofit installed by December 31, 2006
Pre-2000	25	December 31, 2008
	50	December 31, 2009
	100	December 31, 2010
2000	25	December 31, 2009
	50	December 31, 2010
	100	December 31, 2011
2001	25	December 31, 2010
	50	December 31, 2011
	100	December 31, 2012
2002	25	December 31, 2011
	50	December 31, 2012
	100	December 31, 2013
2003	25	December 31, 2012
	50	December 31, 2013
	100	December 31, 2014
2004	25	December 31, 2013
	50	December 31, 2014
	100	December 31, 2015
2005	25	December 31, 2014
	50	December 31, 2015
	100	December 31, 2016
2006	25	December 31, 2015
	50	December 31, 2016
	100	December 31, 2017

Potential Funding

No funding opportunity available for the following project types:

- On-road engine model year 2002 and earlier with retrofit

Funding opportunities remain for the following project types:

- On-road engine model year 2003 with retrofit

Equipment eligible for funding	2011	2012	2013	2014
50% of Group	3			

- On-road engine model year 2004 with retrofit

Equipment eligible for funding	2011	2012	2013	2014	2015
75% of Group	3				
50% of Group	4	3			

- On-road engine model year 2005 with retrofit

Equipment eligible for funding	2011	2012	2013	2014	2015	2016
100% of Group	3					
75% of Group	4	3				
50% of Group	5	4	3			

- On-road engine model year 2006 with retrofit

Equipment eligible for funding	2011	2012	2013	2014	2015	2016	2017
100% of Group	4	3					
75% of Group	5	4	3				
50% of Group	6	5	4	3			

Section 5: In-Use Yard Truck Fleets of Four or More, Engine Certified to Off-road Standard Without VDECS installed by December 31, 2006

Regulatory Requirements

Model Year	Percentage of Group to Use Best Available Control Technology	Off-road engine **without** retrofit installed by December 31, 2006
Pre-2003	50	December 31, 2007
	100	December 31, 2008
2003	25	December 31, 2010
	50	December 31, 2011
	100	December 31, 2012
2004	25	December 31, 2011
	50	December 31, 2012
	100	December 31, 2013
2005	25	December 31, 2012
	50	December 31, 2013
	100	December 31, 2014
2006	25	December 31, 2013
	50	December 31, 2014
	100	December 31, 2015

Potential Funding

No funding opportunity available for the following project types:

- Off-road engine model year 2004 and earlier without retrofit

Funding opportunities remain for the following project types:

- Off-road engine model year 2005 without retrofit

Equipment eligible for funding	2011	2012	2013	2014
50% of Group	**3**			

- Off-road engine model year 2006 without retrofit

Equipment eligible for funding	2011	2012	2013	2014	2015
75% of Group	3				
50% of Group	4	3			

Section 6: In-Use Yard Truck Fleets of Four or More, Engine Certified to Off-road With VDECS installed by December 31, 2006

Regulatory Requirements

Model Year	Percentage of Group to Use Best Available Control Technology	Off-road engine **with** retrofit installed by December 31, 2006
Pre-2003	50	December 31, 2008
	100	December 31, 2009
2003	25	December 31, 2011
	50	December 31, 2012
	100	December 31, 2013
2004	25	December 31, 2012
	50	December 31, 2013
	100	December 31, 2014
2005	25	December 31, 2013
	50	December 31, 2014
	100	December 31, 2015
2006	25	December 31, 2014
	50	December 31, 2015
	100	December 31, 2016

Potential Funding

No funding opportunity available for the following project types:

- Off-road engine model year 2003 and earlier with retrofit

Funding opportunities remain for the following project types:

- Off-road engine model year 2004 with retrofit

Equipment eligible for funding	2011	2012	2013	2014
50% of Group	3			

- Off-road engine model year 2005 with retrofit

Equipment eligible for funding	2011	2012	2013	2014	2015
75% of Group	**3**				
50% of Group	**4**	**3**			

- Off-road engine model year 2006 with retrofit

Equipment eligible for funding	2011	2012	2013	2014	2015	2016
100% of Group	**3**					
75% of Group	**4**	**3**				
50% of Group	**5**	**4**	**3**			

IN-USE NON YARD TRUCKS

Section 1: In-Use Non Yard Truck Fleets of Three or Less

Regulatory Requirements

Engine Model Years	Percentage of Group to Use Best Available Control Technology	Compliance Deadline
Pre-1988	100	December 31, 2007
1988-1995	100	December 31, 2008
1996-2002	100	December 31, 2009
2003-2006	100	December 31, 2010

Potential Funding

No funding opportunity available for engines model year 2006 and earlier.

Section 2: In-Use Non Yard Truck Fleets of Four or More

Regulatory Requirements

Engine Model Years	Percentage of Group to Use Best Available Control Technology	Compliance Deadline
Pre-1988	25	December 31, 2007
	50	December 31, 2008
	75	December 31, 2009
	100	December 31, 2010
1988-1995	25	December 31, 2008
	50	December 31, 2009
	75	December 31, 2010
	100	December 31, 2011
1996-2002	25	December 31, 2009
	50	December 31, 2010
	75	December 31, 2011
	100	December 31, 2012
2003-2006	25	December 31, 2010
	50	December 31, 2011
	75	December 31, 2012
	100	December 31, 2013

Potential Funding

No funding opportunity available for engines model year 2006 and earlier.

Section 3: Final Compliance of In-Use Non-Yard Truck Fleets of Three or Less and In-Use Non-Yard Truck Fleets of Four or More

Basic Container Handling:

- Final compliance is required if the engine was retrofitted to comply, and the retrofit was less than Level 3.
- Final compliance is meeting the certified Tier 4 off-road emission standards or be equipped with a Level 3 VDECS.

Bulk Cargo Handling Equipment:

- Final compliance is required if the engine was retrofitted to comply, and the retrofit was less than Level 2.
- Final compliance is meeting the certified Tier 4 off-road emission standards or be equipped with a Level 3 VDECS.

RTG Cranes:

- Final compliance is required if the engine was retrofitted to comply, and the retrofit was less than Level 3.
- Final compliance is meeting the certified Tier 4 off-road emission standards or be equipped with a Level 3 VDECS.

All Model Years

Regulatory Requirements

Engine Model Years	Percentage of Group to Use Best Available Control Technology	Compliance Deadline
All	100	December 31, 2015

Potential Funding

Funding opportunities remain for this group of engines through 12/31/12.

Equipment eligible for funding	2011	2012	2013	2014	2015
100% of group	**4**	**3**			

Shore Power Projects

- *Rule impacts any person who owns, operates, charters, rents, or leases any U.S. or foreign-flagged container vessel, passenger vessel, or refrigerated cargo vessel that visits a California port, as defined in* California Code of Regulations, title 17, section 93118.3(c).
- *Rule requires reporting to ARB starting July 1, 2009 for all persons with a subject vessel or terminal under their direct control. All terminal operators were required to present their plan for compliance.*
- *The applicant must submit a signed Declaration of Compliance form at the time of application.*
- *Regulatory compliance must be confirmed with Grant Chin of the ARB at (916) 327-5602 or at gchin@arb.ca.gov, no later than the time of pre-inspection. Written confirmation of compliance from ARB must be maintained in district's project files.*
- *Districts are not liable if applicants falsify reports.*
- *Regulatory information can be found at:* http://www.arb.ca.gov/ports/shorepower/shorepower.htm
- *Questions regarding the regulation can be directed to (916) 327-5602 or* gchin@arb.ca.gov

Potential Funding

- Surplus is defined as visits in excess of the regulation on a fleet basis.
- When considering funding opportunities, all visits must be counted towards satisfying compliance with the regulation before any extra visits can be counted as surplus.
  - Any visits counted by the vessel owner towards compliance with the regulation must be subtracted from the total number of visits using shore power to compute surplus.
- The number of visits for each year of the project must be stated in the contract *by year*.
  - Any visit missed in a given year cannot necessarily be made up by a visit in a subsequent year since there would not be any surplus visits in the subsequent years of the contract when the maximum fraction is claimed in each year. Thus, districts should exercise caution when assigning the number of visits to the project.
  - For a given fleet, there are less and less visits per year available as surplus due to the phase-in regulation.
- A visit may not be counted more than once. For example, a unique visit may not be counted towards funding the shore side and then counted again in a different project to fund the vessel side.
- No visit by a vessel to a berth funded by the Goods Movement Emission Reduction Bond Program (Proposition 1B) may be counted as surplus.

- All grants must have a minimum three year project life and may have up to 20 years regardless of the starting calendar year.

Ship Side

Table 1:
Maximum Fraction of a Fleet's Visits for a Given Calendar Year that May be Counted towards Surplus for Vessels

Annual Shorepower Visits	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Compliance					**50%**	**50%**	**50%**	**70%**	**70%**	**70%**	**80%**	**80%**	**80%**
Eligible surplus	**100%**	**100%**	**100%**	**100%**	**50%**	**50%**	**50%**	**30%**	**30%**	**30%**	**20%**	**20%**	**20%**

Since the shore power regulation is structured to generate emission reductions on a fleet basis, surplus is dependent on the fleet's compliance strategy. When considering funding for a specific vessel, the emissions and compliance of the entire fleet must be examined to determine any surplus. Additionally, any change in compliance strategy by the fleet within the contract period would most likely change the availability of surplus emissions. Districts should exercise caution when considering the number of visits assigned to a project. The fraction of a fleet's annual shore power visits for vessel projects counted towards surplus emission reductions for a given calendar year cannot exceed the maximum fraction shown in the table above. The percentages above refer to the entire fleet, not a particular vessel from a given project.

Example:
Assume a vessel project that begins in 2013 with a five year life.

- Up to100 percent of the fleet's visits in 2013 may be counted
- Up to 50 percent of the fleet's visits in 2014 may be counted
- Up to 50 percent of the fleet's visits in 2015 may be counted
- Up to 50 percent of the fleet's visits in 2016 may be counted
- Up to 30 percent of the fleet's visits in 2017 may be counted

If the fleet in this example has five ships, each with two visits per ship per year totaling 10 visits for the whole fleet per year, then there would be a maximum total of 28 surplus visits available (100% of 10 in 2013 + 50% of 10 in 2014 + 50% of 10 in 2015 + 50% of 10 in 2016 + 30% of 10 in 2017). The actual number of surplus visits will most likely be less than the maximum and must be determined by looking at the compliance strategy and emissions of the fleet.

Table 2: Example Fleet

		2013	2014	2015	2016	2017	Total
Vessel #1	Compliance	0	2	2	2	2	8
	Surplus	2	0	0	0	0	2
Vessel #2	Compliance	0	2	2	2	2	8
	Surplus	2	0	0	0	0	2
Vessel #3	Compliance	0	1	1	1	2	5
	Surplus	2	1	1	1	0	5
Vessel #4	Compliance	0	0	0	0	1	1
	Surplus	2	2	2	2	1	9
Vessel #5	Compliance	0	0	0	0	0	0
	Surplus	2	2	2	2	2	10
Total Fleet	Compliance	0	5	5	5	7	22
	Surplus	10	5	5	5	3	28

As seen in the table above, Vessels #1 and #2 are used by the fleet for compliance, with surplus visits in only the first year; since the minimum project life is 3 years, these vessels are not eligible for funding. Vessel #3 has surplus visits in the first four years and would be eligible for funding with a four year life. Vessel #4 has surplus visits in all five years and is also eligible for funding, but only for nine surplus visits over a five year period. Vessel #5 has ten surplus visits in the five year period.

Note:

1) There are many more strategies for compliance available to the example fleet shown above and other strategies will result in a different distribution of surplus visits for each vessel. Surplus for a particular vessel can only be determined by considering the entire fleet.
2) A change in compliance strategy by a given fleet may significantly change the number of surplus visits for a funded vessel. The activity of the entire fleet must be reviewed in order to determine compliance with a grant agreement.

Shore Side

Table 3:
Maximum Fraction of a Fleet's Visits for a Given Calendar Year that May be Counted towards Surplus for Shore Side

Annual Shorepower Visits	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Compliance					**50%**	**50%**	**50%**	**70%**	**70%**	**70%**	**80%**	**80%**	**80%**
Eligible surplus	**100%**	**100%**	**100%**	**100%**									

Shore side projects may not be funded after January 1, 2014, unless the terminal or port is not subject to the Shore Power Regulation. Shore-side projects meeting the eligibility criteria of the Goods Movement Program are eligible for Carl Moyer Program funding only on a case-by-case basis. Carl Moyer Program funds cannot be commingled with Proposition 1B Goods Movement Program funds.

The fraction of a fleet's annual shore power visits in a shore side project counted towards emission reductions for a given calendar year cannot exceed the maximum potential fraction shown in the table above. Surplus is determined by considering the emissions from an entire fleet or group of fleets, not just an individual vessel, nor the total number of visits to a berth from all fleets. The total number of eligible surplus visits is defined as: the total number of visits where a vessel 'plugs-in', minus the number of those visits counted towards compliance by a fleet.

Example:
Assume a shore side project that begins in 2012 with a nine year life.

- Up to 100 percent of the fleets' visits in 2012 may be counted
- Up to 100 percent of the fleets' visits in 2013 may be counted
- Up to 50 percent of the fleets' visits in 2014 may be counted
- Up to 50 percent of the fleets' visits in 2015 may be counted
- Up to 50 percent of the fleets' visits in 2016 may be counted
- Up to 30 percent of the fleets' visits in 2017 may be counted
- Up to 30 percent of the fleets' visits in 2018 may be counted
- Up to 30 percent of the fleets' visits in 2019 may be counted
- Up to 20 percent of the fleets' visits in 2020 may be counted

Assume two different fleets (fleet A and Fleet B) visit the berth in this example. If those two fleets have a combined 100 total annual visits to this port, then there would be a potential maximum total of 460 surplus visits available to the project (100% of 100 in 2012 + 100% of 100 in 2013 + 50% of 100 in 2014 + 50% of 100 in 2015 + 50% of 100 in 2016 + 30% of 100 in 2017 + 30% of 100 in 2018 + 30% of 100 in 2019 + 20% of 100 in 2020). The actual number of eligible surplus visits will most likely be less than the potential maximum and is determined by looking at the compliance strategy and

emissions from the fleets using the berth. The calculation of potential maximum surplus visits above is for both fleets at the entire port, a specific berth may have fewer surplus visits. For example, if this berth receives only 40 of the two fleets 100 annual visits to this port, then there are only 360 potential surplus visits to this berth, minus those visits counted towards compliance; if fleet A represents 25 of these visits and fleet B represents 15 of these visits and fleet A intends to count every one of their visits to this berth towards compliance, while fleet B has retrofitted other vessels and uses other berths to meet their compliance obligations, then 100% of the 15 visits of fleet B are surplus, for a total of 135 eligible surplus visits.

Note that in this example, fleet A and its visits are not relevant to the surplus determination; a project can potentially be justified using the emissions from only a single vessel from a single fleet that uses the berth. In other words, it is not necessary to know the compliance strategy of all of the fleets that use the berth in a proposed project; it is only required to know the compliance strategy for at least one of the fleets using the berth and generating the surplus emissions reductions attributed to the project.

Projects Subject to the Commercial Harbor Craft Regulation

- *Rule applies to any person who sells, supplies, offers for sale, purchases, owns, operates, leases, charters, or rents any new or in-use diesel fueled harbor craft that is operated in any of the Regulated California Waters.*
- *Rule requires reporting to ARB starting February 28, 2009 for all persons with a commercial harbor craft under their direct control. Submitted reports include an initial report, a compliance plan, and a compliance demonstration report.*
- *Regulatory compliance must be confirmed with Todd Sterling of the ARB at (916) 445-1034 or at tsterlin@arb.ca.gov. Written confirmation of compliance from ARB must be maintained in district's project files.*
- *Regulatory information can be found at:* http://www.arb.ca.gov/ports/marinevess/harborcraft.htm
- *Questions regarding the regulation can be directed to 1-888-442-7238 or* harborcraft@arb.ca.gov

Ferries, Excursion Vessels, Tugboats, Towboats, and Push Boats with Homeports Outside SCAQMD

Regulatory Requirements

Vessel Owners must replace the vessel's engine (or implement an approved alternate compliance plan) per California Code of Regulations, title 17, section 93118.5(e)(6)(c) before the dates shown below.

Engine Model Year	Total Annual Hours of Operation	Compliance Date
1975 and earlier	≥ 1500	12/31/2009
1975 and earlier	≥300 and < 1500	12/31/2010
1976 - 1985	≥1500	12/31/2011
1976 - 1985	≥ 300 and < 1500	12/31/2012
1986 - 1995	≥ 1500	12/31/2013
1986 - 1995	≥ 300 and < 1500	12/31/2014
Ferries Only 1996 - 1999	≥ 300	12/31/2014
Vessels Other Than Ferries 1996 - 1999	≥ 1500	12/31/2015
Vessels Other Than Ferries 1996 - 1999	≥ 300 and < 1500	12/31/2016
2000	≥ 1500	12/31/2015
2000	≥ 300 and < 1500	12/31/2016
2001 - 2002	≥ 300	12/31/2017
2003	≥ 300	12/31/2018
2004	≥ 300	12/31/2019
2005	≥ 300	12/31/2020
2006	≥ 300	12/31/2021
2007	≥ 300	12/31/2022

Ferries, Excursion Vessels, Tugboats, Towboats, and Push Boats with Homeports Outside SCAQMD

Potential Funding

Engine Model Year	Total Annual Hours of Operation	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
1976 - 1985	≥1500												
1976 - 1985	≥ 300 and < 1500												
1986 - 1995	≥ 1500												
1986 - 1995	≥ 300 and < 1500	3											
Ferries Only 1996 - 1999	≥ 300	3											
Vessels Other Than Ferries 1996 - 1999	≥ 1500	4	3										
Vessels Other Than Ferries 1996 - 1999	≥ 300 and < 1500	5	4	3									
2000	≥ 1500	4	3										
2000	≥ 300 and < 1500	5	4	3									
2001 - 2002	≥ 300	6	5	4	3								
2003	≥ 300	7	6	5	4	3							
2004	≥ 300	8	7	6	5	4	3						
2005	≥ 300	9	8	7	6	5	4	3					
2006	≥ 300	10	9	8	7	6	5	4	3				
2007	≥ 300	11	10	9	8	7	6	5	4	3			

Ferries, Excursion Vessels, Tugboats, Towboats, and Push Boats with Homeports in SCAQMD

Regulatory Requirements

Vessel Owners must replace the vessel's engine (or implement an approved alternate compliance plan) per California Code of Regulations, title 17, section 93118.5(e)(6)(c) before the dates shown below.

Engine Model Year	Total Annual Hours of Operation	Compliance Date
1979 and earlier	≥ 300	12/31/2009
1980 - 1985	≥ 300	12/31/2010
1986 - 1990	≥ 300	12/31/2011
1991 - 1995	≥ 300	12/31/2012
1996 - 2000	≥ 300	12/31/2013
2001	≥ 300	12/31/2014
2002	≥ 300	12/31/2015
2003	≥ 300	12/31/2016
2004	≥ 300	12/31/2017
2005	≥ 300	12/31/2018
2006	≥ 300	12/31/2019
2007	≥ 300	12/31/2020

Ferries, Excursion Vessels, Tugboats, Towboats, and Push Boats with Homeports in SCAQMD

Potential Funding

Engine Model Year	Total Annual Hours of Operation	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
1986 - 1990	≥ 300										
1991 - 1995	≥ 300										
1996 - 2000	≥ 300										
2001	≥ 300	3									
2002	≥ 300	4	3								
2003	≥ 300	5	4	3							
2004	≥ 300	6	5	4	3						
2005	≥ 300	7	6	5	4	3					
2006	≥ 300	8	7	6	5	4	3				
2007	≥ 300	9	8	7	6	5	4	3			

Crew and Supply Vessels Statewide

Regulatory Requirements

Vessel Owners must replace the vessel's engine (or implement an approved alternate compliance plan) per California Code of Regulations, title 17, section 93118.5(e)(6)(c) before the dates shown below.

Engine Model Year	Total Annual Hours of Operation	Compliance Date
1985 and earlier	≥ 1500	12/31/2011
1985 and earlier	≥ 300 and < 1500	12/31/2012
1986 - 1995	≥ 1500	12/31/2013
1986 - 1995	≥ 300 and < 1500	12/31/2014
1996 - 2000	≥ 1500	12/31/2015
1996 - 2000	≥ 300 and < 1500	12/31/2016
2001 - 2002	≥ 300	12/31/2017
2003	≥ 300	12/31/2018
2004	≥ 300	12/31/2019
2005	≥ 300	12/31/2020
2006	≥ 300	12/31/2021
2007	≥ 300	12/31/2022

Crew and Supply Vessels Statewide

Potential Funding

Engine Model Year	Total Annual Hours of Operation	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
1985 and earlier	≥ 1500												
1985 and earlier	≥ 300 and < 1500												
1986 - 1995	≥ 1500												
1986 - 1995	≥ 300 and < 1500	3											
1996 - 2000	≥ 1500	4	3										
1996 - 2000	≥ 300 and < 1500	5	4	3									
2001 - 2002	≥ 300	6	5	4	3								
2003	≥ 300	7	6	5	4	3							
2004	≥ 300	8	7	6	5	4	3						
2005	≥ 300	9	8	7	6	5	4	3					
2006	≥ 300	10	9	8	7	6	5	4	3				
2007	≥ 300	11	10	9	8	7	6	5	4	3			

Dredges and Barges Statewide (with pre-Tier 1 and Tier 1 engines)

Regulatory Requirements

Vessel Owners must replace the vessel's engine (or implement an approved alternate compliance plan) per California Code of Regulations, title 17, section 93118.5(e)(6)(c) before the dates shown below.

Engine Model Year	Total Annual Hours of Operation	Compliance Date
1975 and earlier	≥ 80	12/31/2011
1976 - 1980	≥ 80	12/31/2012
1981 - 1985	≥ 80	12/31/2013
1986 - 1990	≥ 80	12/31/2014
1991 - 1995	≥ 80	12/31/2015
1996 - 1999	≥ 80	12/31/2016
2000 - 2001	≥ 80	12/31/2017
2002	≥ 80	12/31/2018
2003	≥ 80	12/31/2019
2004	≥ 80	12/31/2020
2005	≥ 80	12/31/2021
2006	≥ 80	12/31/2022

Dredges and Barges Statewide (with pre-Tier 1 and Tier 1 engines)

Potential Funding

Engine Model Year	Total Annual Hours of Operation	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
1975 and earlier	≥ 80												
1976 - 1980	≥ 80												
1981 - 1985	≥ 80												
1986 - 1990	≥ 80	3											
1991 - 1995	≥ 80	4	3										
1996 - 1999	≥ 80	5	4	3									
2000 - 2001	≥ 80	6	5	4	3								
2002	≥ 80	7	6	5	4	3							
2003	≥ 80	8	7	6	5	4	3						
2004	≥ 80	9	8	7	6	5	4	3					
2005	≥ 80	10	9	8	7	6	5	4	3				
2006	≥ 80	11	10	9	8	7	6	5	4	3			

Projects Subject to the Stationary Engine Airborne Toxic Control Measure

- *Rule impacts any owner of a diesel-fueled stationary diesel agricultural engine in California greater than 50 horsepower (hp).*
- *Rule requires engine replacement based on horsepower and engine Tier designation. In addition, engine owners must register or permit all impacted engines in their local air districts.*
- *Remotely located agricultural engines as defined in California Code of Regulation, title 17 section 93115.4 (63), "engines located in a federal ambient air quality area that is designated as unclassifiable or attainment for all PM and ozone national ambient air quality standards, and that are located more than one-half mile from any residential area, school, or hospital," are not subject to the engine replacement provisions of the rule.*
- *Limited funding opportunities for engines that lose their remotely located status due to district loosing unclassifiable or attainment status for any PM or ozone national ambient air quality standards. These owners have 18 months to comply with the existing requirements once notified by APCO or no later than 18 months after the emission standard compliance date, whichever is later as defined in California Code of Regulation, title 17, section 93115.10(d). Potential projects must be installed and in operation within six months from the date of notification to be eligible with a one-year project life.*
- *Projects funded under the Carl Moyer Program Guidelines, Chapter 10, section C.6.(B), in which funding is based on local rule eligibility must have its Air Pollution Control Officer self-certify via email or letter to their ARB Moyer liaison that the local rule is equally as effective as or more stringent than the ATCM. Engine repowers claiming only surplus NOx and ROG emission reductions will be eligible for funding at a reduced rate of half of the typical 85 percent repower (i.e., 42.5 percent).*
- *Eligible projects meeting requirements of SBx2 3:*
    - *Eligible for up to the incremental cost.*
    - *Eligible for up to a ten year project life.*
    - *Must be installed and in operation prior to the compliance date.*
- *The applicant must provide a copy of the district's stationary engine registration/permit with their Moyer application.*
- *Throughout the contract term, projects funded by the Carl Moyer Program must not be used to generate credits, compliance extensions, and must be excluded when determining regulatory compliance.*
- *Applicants must submit a signed Declaration of Compliance form at the time of application.*
- *No later than the time of pre-inspection, applicants must submit a signed statement that all of their stationary engines are compliant with the Stationary Engine ATCM or with their local district requirements.*
- *Districts are not liable if applicants falsify reports.*

- *Regulatory information can be found at: http://www.arb.ca.gov/diesel/ag/inuseag.htm.*
- *Questions regarding compliance can be directed to Jon Manji of the ARB at (916) 327-1507 or jmanji@arb.ca.gov.*

Existing Uncontrolled Engines

Regulatory Requirements

Horsepower Range	Diesel PM Not to Exceed (g/bhp-hr)	Engine Tier level required for compliance	Compliance Date
> 50 to 99	0.30	Tier 3	Dec. 31, 2011
100 to 174	0.22	Tier 3	Dec. 31, 2010
175 to 750	0.15	Tier 3	Dec. 31, 2010
> 750	0.075	Interim Tier 4	Dec. 31, 2014

Section 1: Replacement with Diesel Engine
Uncontrolled diesel agricultural engines may be eligible for Moyer funds for a repower project with a new diesel engine. The chart below indicates project lives prior to the compliance deadlines.

Uncontrolled stationary diesel-fueled agricultural use engines	2011	2012	2013	2014	2015
< 100 hp					
100 – 750 hp					
> 750 hp	**3**	**2**	**1**		

Section 2: Replacement with Electric Motor

Uncontrolled diesel agricultural engines may be eligible for Moyer funds for a repower project with a new electric motor until the compliance date using the eligibility chart below. Projects must be in operation prior to the compliance date of the ATCM. Baseline emissions for the project are calculated as follows:

- Uncontrolled engine emissions are calculated for project year dates to the left of the "striped" year in the table below.
- Tier 3 diesel emissions only for 75 to < 99 hp size engines and interim Tier 4 (or Tier 4 Phase In/Alternate NOx) diesel emissions for all other engines would be calculated for the "striped" year and for project year dates to the right of the compliance date on the table.

Uncontrolled stationary diesel-fueled agricultural use engines	2011	2012	2013	2014	2015
< 100 hp	**10**				
100 – 750 hp					
> 750 hp	**10**	**10**	**10**	**10**	

Section 3: Replacement with Natural Gas Engine

Uncontrolled diesel agricultural engines may be eligible for Moyer funds for a repower project with a new natural gas engine until the compliance date using the eligibility chart below. Projects must be in operation prior to the compliance date of the ATCM. Baseline emissions for the project are calculated as follows:

- Uncontrolled engine emissions are calculated for project year dates to the left of the "striped" year in the table below.
- Tier 3 diesel emissions only for 75 to < 99 hp size engines and interim Tier 4 (or Tier 4 Phase In/Alternate NOx) diesel emissions for all other engines would be calculated for the "striped" year and for project year dates to the right of the compliance date on the table.

Uncontrolled stationary diesel-fueled agricultural use engines	2011	2012	2013	2014	2015
< 100 hp	**7**				
100 – 750 hp					
> 750 hp	**7**	**7**	**7**	**7**	

Existing Tier 1 and Tier 2 Engines

Regulatory Requirements

Horsepower Range	Diesel PM Not to Exceed (g/bhp-hr)	Engine Tier level required for compliance	Compliance Date
> 50 to 74	0.02	Tier 4	Dec. 31, 2015 *
75 to 174	0.01	Tier 4	Dec. 31, 2015 *
175 to 750	0.01	Tier 4	Dec. 31, 2014 *
>750	0.075	Interim Tier 4	Dec. 31, 2014 *

* Or 12 years after the date of initial installation, whichever is later

Section 1: Replacement with Diesel Engine

Tier 1 and Tier 2 diesel agricultural engines may be eligible for Moyer funds for a repower project with a new diesel engine. The chart below indicates project lives prior to the compliance deadlines.

Tier 1 and Tier 2 stationary diesel-fueled agricultural use engines	2011	2012	2013	2014	2015	2016
> 50 - 74 hp	**4**	**3**	**2**	**1**		
75 to 174	**4**	**3**	**2**	**1**		
175 – 750 hp	**3**	**2**	**1**			
> 750 hp	**3**	**2**	**1**			

Note: Engines may have later compliance dates depending on date of initial installation of existing engines. Districts must determine project eligibility based on surplus emission reductions prior to the compliance date.

Section 2: Replacement with Electric Motor

Tier 1 and Tier 2 diesel agricultural engines may be eligible for Moyer funds for a repower project with a new electric motor until the compliance date using the eligibility chart below. Baseline emissions for the project are calculated as follows:

- Existing Tier 1 or Tier 2 engine emissions are calculated for project year dates to the left of the "striped" year in the table below.
- Tier 4 diesel emissions (interim Tier 4 diesel emissions for 75 to >175hp and > 750 hp engines) are calculated for the "striped" year and for project year dates to the right of the compliance date on the table.

Tier 1 and Tier 2 stationary diesel-fueled agricultural use engines	2011	2012	2013	2014	2015	2016
> 50 - 74 hp	**10**	**10**	**10**	**10**	**10**	
75 to 174	**10**	**10**	**10**	**10**	**10**	
175 – 750 hp	**10**	**10**	**10**	**10**		
> 750 hp	**10**	**10**	**10**	**10**		

Note: Engines may have later compliance dates depending on date of initial installation of existing engines. Districts must determine project eligibility based on surplus emission reductions prior to the compliance date.

Section 3: Replacement with Natural Gas Engine

Tier 1 and 2 diesel agricultural engines may be eligible for Moyer funds for a repower project with a new natural gas engine until the compliance date using the eligibility chart below. Baseline emissions for the project are calculated as follows:

- Existing Tier 1 or Tier 2 engine emissions are calculated for project year dates to the left of the "striped" year in the table below.
- Tier 4 diesel emissions (interim Tier 4 diesel emissions for 75 to >175hp and > 750 hp engines) are calculated for the "striped" year and for project year dates to the right of the compliance date on the table.

Tier 1 and Tier 2 stationary diesel-fueled agricultural use engines	2011	2012	2013	2014	2015	2016
> 50 - 74 hp	**7**	**7**	**7**	**7**	**7**	
75 to 174	**7**	**7**	**7**	**7**	**7**	
175 – 750 hp	**7**	**7**	**7**	**7**		
> 750 hp	**7**	**7**	**7**	**7**		

Note: Engines may have later compliance dates depending on date of initial installation of existing engines. Districts must determine project eligibility based on surplus emission reductions prior to the compliance date.

Projects Subject to the Portable Engine Airborne Toxic Control Measure

- *Rule impacts any owner of a diesel-fueled portable or pull-behind diesel engine in California 50 horsepower (hp) and greater.*
- *Auxiliary engines on equipment may be subject to this ATCM with the exception of auxiliary engines on two-engine cranes, water well drilling rigs, dedicated snow removal vehicles and privately owned twin-engine street sweepers.*
- *Portable engines used exclusively at an agricultural source are regulated under the Stationary Engine ATCM. Consult the Stationary Engine ATCM Carl Moyer Implementation Charts.*
- *Rule requires engine replacement based on fleet weighted PM emission compliance engine deadlines.*
- *Rule requires only certified Tier 1, Tier 2 or Tier 3 engines to operate after 1-1- 2010. Uncontrolled engines are no longer able to operate after 1-1-2010.*
- *Owners must demonstrate compliance to ARB and submit statement of compliance reports by 3-1-2013, 3-1-2017 & 3-1-2020 for standards effective 1-1-2013, 1-1-2017 and 1-1- 2020 as required in California Code of Regulation, title 17, section 93116.4(e)(2) .*
- *If districts require portable permits then the applicant must provide a copy of the permit with their Moyer application.*
- *Applicants must submit a signed Declaration of Compliance form at the time of application.*
- *No later than the time of pre-inspection, applicants must submit the most recent required fleet report with the Moyer application as required in California Code of Regulation, title 17, section 93116.4(e)(1) and statements of compliance reports, certified by applicant, that will show the applicant's fleet for which he is applying is 3 years ahead of compliance requirements.*
- *Districts are not liable if applicants falsify reports.*
- *Throughout the contract term, projects funded by the Carl Moyer Program must not be used to generate credits, compliance extensions, and must be excluded when determining regulatory compliance.*
- *Regulatory information can be found at: http://www.arb.ca.gov/diesel/ag/inuseag.htm.*
- *Questions regarding compliance can be directed to Joseph Gormley of the ARB at (916) 322-5616 or jgormley@arb.ca.gov.*

Uncontrolled Engines

Regulatory Requirements

Uncontrolled engines regulated under the Portable Engine ATCM were required to meet compliance requirements by January 1, 2010.

Potential Funding

No funding opportunities available for these projects.

Existing Tier Engines

Regulatory Requirements

Weighted PM Emission Fleet Average Requirements

Fleet Standard Compliance Date	Engines < 175 hp (g/bhp-hr)	Engines 175 -750 hp (g/bhp-hr)	Engines > 750 hp (g/bhp-hr)
1/1/2013	0.3	0.15	0.25
1/1/2017	0.18	0.08	0.08
1/2/2020	0.04	0.02	0.02

Section 1: Fleets with engines < 175 hp

Fleetwide PM levels	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
>0.18 - ≤ 0.3	**5**	**4**	**3**							
> 0.04 - ≤0.18	**7**	**7**	**6**	**5**	**4**	**3**				
≤0.04	**Maximum Project Life**									

- If fleets < 175 hp meet the 0.3 PM weighted compliance deadline then fleets may be eligible for Moyer funds for a repower project through 2013.
- If fleets < 175 hp meet the 0.18 PM weighted compliance deadline then fleets may be eligible for Moyer funds for a repower project through 2016.
- If fleets < 175 hp meet the 0.04 PM weighted compliance deadline then fleets may be eligible for Moyer funds for a repower project.

Section 2: Fleets with engines 175 to 750 hp

Fleetwide PM levels	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
> 0.08 - ≤ 0.15	**5**	**4**	**3**							
> 0.02 - ≤0.08	**7**	**7**	**6**	**5**	**4**	**3**				
≤0.02	**Maximum Project Life**									

- If fleets 175 to 700 hp meets the 0.15 PM weighted compliance deadline then fleets may be eligible for Moyer funds for a repower project through 2013.
- If fleets 175 to 700 hp meets the 0.08 PM weighted compliance deadline then fleets may be eligible for Moyer funds for a repower project through 2016.
- If fleets 175 to 700 hp meets the 0.02 PM weighted compliance deadline then fleets may be eligible for Moyer funds for a repower project.

Section 3: Fleets with engines > 750 hp

Fleetwide PM levels	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
> 0.08 - ≤ 0.25	**5**	**4**	**3**							
> 0.02 - ≤0.08	**7**	**7**	**6**	**5**	**4**	**3**				
≤0.02	**Maximum Project Life**									

- If fleets > 750 hp meet the 0.25 PM weighted compliance deadline then fleets may be eligible for Moyer funds for a repower project through 2013.
- If fleets > 750 hp meet the 0.08 PM weighted compliance deadline then fleets may be eligible for Moyer funds for a repower project through 2016.
- If fleets < 750 hp meet the 0.02 PM weighted compliance deadline then fleets may be eligible for Moyer funds for a repower project.